



**TOWN OF GRAFTON**  
GRAFTON MEMORIAL MUNICIPAL CENTER  
30 PROVIDENCE ROAD

GRAFTON, MASSACHUSETTS 01519  
(508) 839-5335 ext 1100 • FAX (508) 839-4602  
[www.grafton-ma.gov](http://www.grafton-ma.gov)

**BOARD OF SELECTMEN**  
**MEETING AGENDA**  
December 11, 2018  
Municipal Center, Conference Room A  
7:00 p.m.

**CALL TO ORDER**

**ANNOUNCEMENTS**

**1. SCHEDULE**

- a) Board of Library Trustees – Committee Update

**2. RESIGNATIONS**

- a) Vote to accept resignation – Brian Bavosi  
Wastewater Treatment Plant Operator & Auxiliary Firefighter, Station One

**3. APPOINTMENTS**

**Board of Selectmen**

- a) Vote to Appoint - Together We Can Committee, Diane Racicot

**Town Administrator**

- b) Vote to Affirm Appointment – Carrie Ann Cadrin, Treatment Plant Operator
- c) Vote to Affirm Appointment - Laura-Ellen Cassady, Public Safety Dispatcher (Part-Time)
- d) Vote to Affirm Appointment – Mike Cadrin, Temporary Treatment Plant Operator (Part-Time)

**4. NEW BUSINESS**

- a) Vote to Authorize Chairman to Sign Chapter 90 Request – Stowe Road Culvert Replacement
- b) Vote to Sign Agreement – Bay Side Engineering, Stowe Road Culvert Replacement
- c) Vote to Create a Gift Account – Grafton's Community Emergency Response Team (C.E.R.T.S)

**5. SELECTMEN REPORTS / TA REPORTS**

**6. CORRESPONDENCE**

**7. DISCUSSION**

**8. MEETING MINUTES**

**EXECUTIVE SESSION**

MGL Chapter 30A, Sec. 21(3)

Litigation Update

Litigation Strategy

Union Negotiations

Land Negotiation

Non Union Negotiations

Strategy for Negotiations

Minutes

**ADJOURN**

### **SCHEDULE 1 (a) BOARD OF LIBRARY TRUSTEES**

As part of the Selectmen's "Touch Base Meetings" members of the Board of Library Trustees will be attending the meeting to give a brief update/outline of what the group has worked on and/or has coming up in the near future.

#### **MEMBERS:**

Doug Bowman  
Kristi Lutjelusche  
Marilyn Cusher  
Karen Durand  
Aaron Vandesteen  
Dana Wilson  
Martina Arndt

#### **NO ACTION NEEDED**

## **#2 (a) RESIGNATIONS: WASTE WATER TREATMENT FACILITY**

Brian Bavosi, an Operator at the Wastewater Treatment Plant and an Auxiliary Fireman has submitted his resignation letter from both the WWTP and the Grafton Fire Department. The board is being asked to accept his letter of resignation.

### **MOTION:**

I move the board vote to accept the resignation of Brian Bavosi from the Wastewater Treatment Facility and the Grafton Fire Department.

**Brian Bavosi**

16 Carrier Ln., Sutton, MA 01590\_774-535-3672\_bbavosi@gmail.com

December 1, 2018

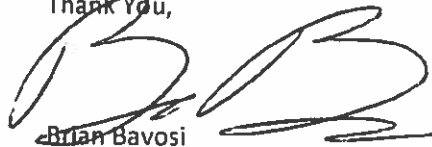
Paul Cournoyer  
Director of Public Works  
Town of Grafton Wastewater Treatment Plant  
9 Depot St.  
S. Grafton, MA 01560

Dear Paul,

I am writing this letter to announce my resignation from the position of Operator at the Town of Grafton Wastewater Treatment Plant, effective December 14, 2018. In the past month I have been presented with an employment offer that I can't pass up. I will always cherish my time at the Treatment Plant and have enjoyed working with some truly amazing people.

The position of Operator has allowed me to learn so many things and I am grateful for all of the opportunities that you have given me. Your leadership and guidance have allowed me to grow in my position as Operator and the knowledge I have gained from you will be with me for a lifetime.

Thank You,

  
Brian Bavosi

**Brian Bavosi**

16 Carrier Ln., Sutton, MA 01590\_774-535-3672\_bbavosi@gmail.com

December 1, 2018

Paul Cournoyer  
Captain Station 1  
Town of Grafton Wastewater Treatment Plant  
9 Depot St.  
S. Grafton, MA 01560

Dear Capt. Cournoyer,


It is with sadness that I must write this letter to announce my resignation from the position of Auxiliary Firefighter with the Town of Grafton Fire Dept., effective December 14, 2018.

It has been a privilege and honor to protect the community along with so many courageous men and women of the fire service. The members of the Grafton Fire Dept. are an extremely dedicated and professional group of men and women that I will proudly say that I served with.

Whether it was training or an emergency, as a member of Station One I always felt reassured that I was surrounded by the most responsible and reliable personnel possible. The leadership and guidance by the officers and senior members has helped me mature, thrive, and grow as a firefighter.

I am forever grateful for the fond memories and life experiences I have gathered from you and the Grafton Fire Dept.

Sincerely,



Brian Bavosi

### **#3 (a) SELECTMEN APPOINTMENTS – TOGETHER WE CAN**

Diane Racicot submitted a letter of interest to serve on the Together We Can Committee. The Committee Chair is in support of this appointment noting Diane is already attending meetings on a regular basis.

Diane is a teacher at the Grafton High School and will be an asset to the committee.

#### **Brief Committee Description:**

Together We Can was formed in 1995. The group plans and organizes activities that help young people avoid risk factors such as drugs, alcohol and violence. Through mostly donations, the group sponsors several events for Students throughout the year, offers scholarships and volunteers at local events such as National Night Out.

#### **MOTION:**

I move the board vote to appoint Diane Racicot as a member of Together We Can.



# GRAFTON HIGH SCHOOL

24 Providence Road  
Grafton, MA 01519  
Tel: 508-839-5425  
Fax: 508-839-8544

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James Pignataro, *Principal*

Karla Koza, *Assistant Principal*

Jonathan Kelly, *Assistant Principal*

November 12, 2018

Board Of Selectmen  
Town of Grafton  
Grafton Municipal Center  
30 Providence Road  
Grafton, Massachusetts 01519

Dear Board of Selectmen:

I am interested in joining the Together We Can Committee for the 2018-19 fiscal year as the Grafton Public Schools Teacher representative. I am the Family and Consumer Sciences teacher at Grafton High School and advisor to the Family and Community Leaders club. The FCL club assists TWC with several of their events each year.

Sincerely,

Diane Racicot



Email from the Chair of Together We Can

On Thu, Dec 6, 2018 at 10:09 AM Deborah Trapasso <> wrote:

Hi, Cindy,

Thank you for contacting me. Diane Racicot has actually been assisting the committee for almost a year now. She had been instrumental in getting GHS students involved in our community service projects.

Diane will be a great asset to our committee.

Debbie

On Thu, Dec 6, 2018 at 9:23 AM Cindy Ide <[idec@graffton-ma.gov](mailto:idec@graffton-ma.gov)> wrote:

Hi Deb,

We received a request from Diane Racicot to serve on the committee Together We Can.

We have a meeting on Dec 11<sup>th</sup>. If you agree, we can have her appointed then.

### **#3 (b) APPOINTMENTS / TOWN ADMINISTRATOR**

With the recent retirement of an Operator at the Treatment Plant, the position was advertised, interviews held and a recommendation to hire Carrie-Ann Cadrin was sent to the Town Administrator.

### **MOTION:**

I move the board vote to affirm the Town Administrator's appoint of Carrie-Ann Cadrin to the position of Wastewater Operator.

*Town of Grafton*  
Department of Public Works

PAUL F. COURNOYER  
Director  
30 Providence Road  
Grafton, MA 01519  
Phone: (508) 839.8526 Fax: (508) 839.8523  
cournoyerp@graffon-ma.gov

December 6, 2018

Board of Selectmen  
30 Providence Road  
Grafton, MA. 01519

Subject: Carrie-Ann Cadrin

Dear Board Members:

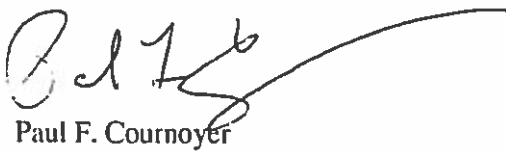
I respectfully request the appointment of Carrie-Ann Cadrin to the position of Wastewater Operator.

Carrie-Ann is a lifelong Grafton resident with an extensive knowledge of the community and its residents. She is also personally aware of the Sewer Dept expectations, needs, and requirements. Carrie-Ann has been working for the town as part-time snow plow driver for the last several years. She is currently a solid waste truck driver with a CDL-B driver's license.

Carrie-Ann successfully ran her own business until a devastating fire in 2017. The organizational skills she acquired through that experience will benefit the Sewer Dept in prioritizing the ever changing daily demands of the wastewater treatment plant and collection system.

Thank you for your ongoing support and if you have any questions or concerns please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. F. Cournoyer', with a long horizontal flourish extending to the right.

Paul F. Cournoyer  
Director

### **#3 (c) APPOINTMENTS / TOWN ADMINISTRATOR**

Chief Crepeau has submitted a recommendation to appoint Laura-Ellen Cassady as a Part Time Public Safety Dispatcher. She has dispatching experience and has obtained all requisite qualifications for Public Safety Dispatchers.

### **MOTION:**

I move the board vote to affirm the Town Administrators appointment of Laura Ellen Cassady as a Part Time Public Safety Dispatcher.



# Grafton Police Department

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28 Providence Road • Grafton, Massachusetts 01519

Telephone: (508) 839-8517 • Fax: (508) 839-8562

*Normand A. Crepeau, Jr.*  
*Chief of Police*

DATE: December 5, 2018

TO: Timothy P. McNerney - Town Administrator

SUBJECT: Recommendation for part-time Public Safety Dispatcher

Ms. Laura-Ellen Cassady has been training with the Grafton Police Department on her own time in the hope of becoming a part-time dispatcher with this department. She is currently a full-time dispatcher for the Town of Paxton having served there for approximately 3 years. Ms. Cassady has already obtained all requisite qualifications for Public Safety Dispatcher including PowerPhone Emergency Medical Dispatch, APCO PST1, 911 Next Generation and CPR certifications.

Based on reviews from dispatcher trainers, I recommend that Laura-Ellen Cassady of Millbury, MA be appointed as a part-time dispatcher for the Grafton Police Department.

If you have any questions or require further information, please do not hesitate to contact me.

Respectfully Submitted,

  
Normand A. Crepeau, Jr.  
Chief of Police

### **#3 (d) APPOINTMENTS / TOWN ADMINISTRATOR**

With the departure of operator Brian Bavosi, Paul Cournoyer has asked that we temporarily appoint Michael Cadrin as a Part Time Wastewater Operator. During this transition time, (Brian resigning and Carrie beginning work) it will be beneficial to the team and the operations to have Mike on board as a part time operator

### **MOTION:**

I move that the board vote to appoint Michael Cadrin as a Temporary Part Time Wastewater Operator.

*Town of Grafton*  
Department of Public Works

PAUL F. COURNOYER  
Director  
30 Providence Road  
Grafton, MA 01519  
Phone: (508) 839.8526 Fax: (508) 839.8523  
cournoyerp@graffon-ma.gov

December 6, 2018

Board of Selectmen  
30 Providence Road  
Grafton, MA. 01519

Subject: Mike Cadrin

Dear Board Members:

I respectfully request the appointment of Mike Cadrin to the position of temporary part-time employee for the Sewer Dept.

With the recent planned retirement and resignation of another staff member the Sewer Dept will be short staffed for the next several months. Mikes 35yrs of full time service and understanding of the wastewater treatment and collection system make him an excellent choice. His willingness to serve on a part-time basis is a testament to his dedication to the dept. and town.

Thank you for your ongoing support and if you have any questions or concerns please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Paul F. Cournoyer', with a long, sweeping horizontal line extending to the right.

Paul F. Cournoyer  
Director

#### **4 (a) NEW BUSINESS – CHAPTER 90 REQUEST – STOWE ROAD CULVERT**

The Engineering Department has submitted a Chapter 90 Project Request for the Stowe Road Culvert. The Chairman will be asked to sign the document. Paul Cournoyer will be in attendance to answer any questions you may have.

#### **MOTION:**

I move the board vote to authorize the chairman to sign the Chapter 90 application for the Stowe Road Culvert project.



# STATE AID REIMBURSABLE PROGRAMS - PROJECT REQUEST

updated 12/17

**\*2 Original Signed Project Request Forms are to be submitted.**

CONTRACT # 50813

PROGRAM TYPE: Chapter 90 ☒ Muni Bridge ☐ Complete Streets ☐ Other ☐

Project Name: Engineering-Stowe Road Culvert

Primary Road: \_\_\_\_\_

Local Road: \_\_\_\_\_

Bridge #: G-08-048

City/Town: Grafton

Location(s) Stowe Road over Miscoe Brook

Length: \_\_\_\_\_ feet Width: \_\_\_\_\_ feet

## PROJECT TYPE

Construction: ☐ Resurfacing: ☐ Engineering: ☒ Equipment: ☐

Other: \_\_\_\_\_

**TYPICAL SECTION DETAILS:** Indicate depths, special treatments, etc... Also please include sketch for Construction/Improvement Projects.

Surface: \_\_\_\_\_

Base Course: \_\_\_\_\_

Foundation: \_\_\_\_\_

Shoulders/Sidewalks: \_\_\_\_\_

## SCOPE OF WORK:

Field data collection, design and permitting to replace the existing structurally deficient structure

## WORK TO BE DONE:

Force Account: ☐ Advertised Contract: ☐ Other: Best Practice

Estimated Cost (Please attach estimate and list funding source(s)): \$ 55,500.00

**\*\*These funds will pay 100% of Local Road Project costs to the limit of this assignment\*\***

## CERTIFICATION

The design, engineering, construction, and future performance of the project, including maintenance, is the responsibility of the Municipality. The proposed work will conform to recognized engineering and construction methods. I/We herby certify under penalty of perjury the following: that the project is on a public way, and any necessary takings have been made; that all materials will comply with approved established specifications; that all weights and quantities will be accurate; that equipment rental rates are those established by MassDOT Highway or the advertised low bid; that all documentation will be checked for accuracy, and will be endorsed in accordance with municipal procedures for accountability.

### Reviewed by:

Signed: \_\_\_\_\_

State Aid Engineer

Date

Road Classification Verified: \_\_\_\_\_

Approved for \$ \_\_\_\_\_ @ 100%

District Highway Director

Date

Signed: \_\_\_\_\_

Brian Saggino 12/6/18

Engineer

Highway Official's Title

Date

Accounting Official's Title

Date

Date

Duly Authorized Municipal Officials

**4 (b) NEW BUSINESS – SIGN AGREEMENT - BAYSIDE ENGINEERING,  
STOWE ROAD CULVERT**

The Stowe Road, Miscoe Brook Culvert structure has reached the end of its service life. The Selectmen are being asked to sign a contract with Bayside Engineering for Professional Engineering Services for performing initial project standards for culvert replacement on Stowe Road.

**MOTION**

I move the board vote to sign the Professional Engineering Service agreement with Bayside Engineering Inc. for the Stowe Road Culvert project.



November 30, 2018

Mr. Brian Szczurko  
Department of Public Works / Engineering  
30 Providence Road  
Grafton, MA 01519

RE: ***G-08-048 Stowe Road over  
Miscoe Brook Culvert Replacement***

Dear Mr. Szczurko:

Bayside Engineering is pleased to present a price proposal and scope of work for the Stowe Road over Miscoe Brook culvert replacement. As the bridge inspection team leader on the December 2016 inspection of this structure, I can say with confidence this structure has reached the end of its service life. In the recent past, Bayside has completed culvert replacement field data collection and design for several culverts ranging from 8 feet to 20 feet, so we are familiar with designing for different site conditions and flows.

Please do not hesitate to contact me if you have any questions about the scope of work. We look forward to working with the Town of Grafton on this project.

Sincerely,

BAYSIDE ENGINEERING, INC.

A handwritten signature in cursive script that reads "Bree Sullivan".

Bree Sullivan, P.E.  
Senior Civil and Environmental Engineer

**AGREEMENT FOR PROFESSIONAL  
ENGINEERING SERVICES  
BETWEEN  
THE TOWN OF GRAFTON, MASSACHUSETTS  
AND  
BAYSIDE ENGINEERING, INC.  
FOR  
PROFESSIONAL ENGINEERING SERVICES  
FOR PERFORMING INITIAL PROJECT STANDARDS FOR CULVERT  
REPLACEMENT ON STOWE STREET, GRAFTON, MA**

This AGREEMENT, made and entered into the \_\_\_\_\_ day of \_\_\_\_\_, 2018 by and between the TOWN OF GRAFTON, MASSACHUSETTS (hereinafter referred to as the "TOWN,") and BAYSIDE ENGINEERING, INC., a corporation organized and existing under the laws of the Commonwealth of Massachusetts and having a usual place of business at 600 Unicorn Park Drive, Woburn, Massachusetts (hereinafter referred to as "BAYSIDE,").

WHEREAS, the TOWN desires BAYSIDE to perform professional engineering services associated with assisting the TOWN in performing initial project standards for the culvert replacement on Stowe Street in Grafton, MA.

The TOWN and BAYSIDE, for the consideration hereafter set forth, agree as follows:

***I. GENERAL***

The crossing at Stowe Road is 80 years old and is a bridge comprised of steel trolley rails embedded in a reinforced concrete deck slab supported by two concrete abutments. The north bridge railing is a W-shaped highway guardrail with steel posts welded to embedded pipe sleeves. The south barrier is a highway precast New Jersey barrier resting on the deck slab. The barriers have no solid attachment to the bridge and the north rail moves easily to the touch and the south barrier is rotated outward. The bottom surface of the concrete deck has several full length cracks with efflorescence. The presence of efflorescence indicates that stormwater is traveling through the slab and weakening the concrete. Each fascia of the slab has been eaten away exposing the exterior rail beams. The abutments have severe spalling that exposes the stone masonry behind. The wingwalls are dry laid stone masonry with missing stones. Currently the town has installed additional barriers to restrict the travel way to a single lane.

This scope will include the field data collection and analysis, culvert design, permitting and bid document preparation part of the culvert replacement project. The design will be geared toward meeting the goals of the Massachusetts Stream Crossing Standards. Application of these standards to culvert design will improve passage for fish and wildlife, increase storm resiliency, and will reduce hazards to public safety caused by the undersized and failing culvert.

The specific tasks to be performed are listed in the following Section II "Scope of Services,."

## II. SCOPE OF SERVICES

### Task 1) Geotechnical Evaluation

- A. Perform a subsurface investigation and soils analysis, including at least two borings adjacent to the culvert within the limits of the roadway.
- B. Provide a detailed analysis of the boring findings, such things as bearing capacity, engineering properties, material gradations, etc.

### Task 2) Site Reconnaissance and Resource Delineation

- A. Perform a wetland resource area delineation of the project area within the vicinity of the culvert (USACE Determination forms and associated materials required).
- B. Perform a riverbed substrate analysis, i.e. pebble-count, to understand the existing riverbed substrate and provide data to calculate the design stream bed material.
- C. Identify the type and integrity of stream grade controls on an accurate (but not to scale) field sketch so locations are able to be surveyed.
- D. Identify and flag at least six (6) bank full width measurement locations and representative cross-sections to be surveyed (3 upstream and 3 downstream of culvert). At least one (1) representative cross-section within each reference reach.
- E. Identify and flag the necessary floodplain cross-sections needed for hydraulic modelling.
- F. Identify and flag appropriate reference reaches (1-2) with similar slope to the road-stream crossing location.
- G. Identify key site features that may act as constraints to replacing the crossing, such as utilities, including infrastructure upstream and downstream. Describe and photograph significant features.

### Task 3) Survey the Road-Stream Crossing

This task shall occur in consultation and coordination from the consultant's river expert.

- A. Perform a radial topographic survey and include other relevant features; including, but not limited to resource areas, adjacent areas for the potential use of stormwater features, headwall/wingwall locations and elevations, centerline elevation of the road, site topography at least 50 feet from the edge of the road, and geotechnical boring locations.
- B. Survey longitudinal profiles of the river approximately 150 feet upstream and downstream of the road; including, but not limited to longitudinal profile features (steps, pools, riffles, glides), grade control locations and elevations, culvert invert elevations, top of culvert elevation, locations of bank full width measurements, representative cross-sections above and below each culvert, and mean annual high water.
- C. Survey key site features that may act as constraints to replacing the crossing.
- D. Identify adjacent property lines and roadway right-of-way.
- E. Prepare an existing conditions topographic plan and plot the streambed longitudinal profile and cross sections for each crossing.

Task 4) Hydrologic / Hydraulic Studies: Determine existing hydrology of the site as necessary to inform design

- A. Conduct a hydrologic study of the project site, using appropriate methods. Identify typical low flows, the bank full discharge, 5-year, 10-year, and 100-year discharges, or other flows essential to the engineering and design process.
- B. Conduct a hydraulic analysis to predict water depths, velocities, and water surface profiles for existing conditions. Identify any existing erosion concerns adjacent to the existing culvert.

Task 5) Recommend a Structure Type and Cost Estimate

- A. The consultant shall use their expertise to develop a plan to best evaluate the most appropriate structure for the site. The plan shall consider design and construction costs, constructability; including construction duration and water control. The structure evaluation should provide us definable metrics to demonstrate the pros and cons of the recommended structure as compared to other structure types.

Task 6) Preliminary Design

- A. Perform supplementary field investigation to refine stream dynamics.
- B. Using field investigation technical report (previously prepared) and supplemental field data develop preferred alternative plans.

Task 7) Engineering Design

- A. Hydraulic Design - Model the proposed structure for water surface elevation, scour, sediment transport, and velocity to understand the hydraulic forces and design the stream bed so that flow conditions and hydraulic dynamics in the culvert are comparable to the upstream and downstream stream channel.
- B. Geotechnical Design - Design the crossing within the limitations of the substrate characteristics.
- C. Structural Design - Design the crossing to meet the structural needs of the road type and meet MassDOT standards when applicable.

Task 8) Final Design

- A. Final Design Plans – Develop plans to completion ready for P.E. stamp.
- B. Submit plans for MassDOT Chapter 85 review (if applicable).
- C. Construction Details – Develop complete details sufficient for construction.
- D. Detour Plan – Develop road closure detour plan using input from key stakeholders in the Town including but not limited to Town administrator, police, fire, and project abutters.

Task 9) Permitting

- A. File a Notice of Intent with the Grafton Conservation Commission under the wetlands and rivers protection act, and the local wetland bylaw; attendance at two meetings and a site walk.
- B. 401 Water Quality Certification (the quantity and nature of work in this project is expected to be covered under the order of conditions issued by the conservation commission under the WPA/RPA)

- C. Army Corps. of Engineers Programmatic General Permit (GPI) Self-verification (SV) or Preconstruction Notification Filing (PCN) – provide necessary documentation for filing with the ACOE under the Massachusetts General Permit.

Task 10) Construction Bidding Documents

- A. Develop specifications, Engineer's estimate and other bidding documents for bid solicitation in accordance with Town requirements and industry standards.

(Task 11) Bid Review and Construction Services

- A. Bayside will administer the bidding process including plans and specification copying and distribution, bid review and bid award recommendations.
- B. As specified in the request for proposals, shop drawing review and construction supervision are not included in this scope of work.

**III. FEES**

- A. The TOWN will pay BAYSIDE full compensation for the work as described in Section II, "Scope of Services" Task 1-10 Design Services, the not to exceed fee of \$ 50,000.00. For the work as described in Section II, "Scope of Services" Task 11 Bid Review and Construction Services, the not to exceed fee of \$ 5,500.00. The fee for work will be billed on a time and materials basis monthly and will not exceed the total fee without prior approval from the Town of Grafton.

**IV. MISCELLANEOUS**

- A. It is understood that all information that the TOWN has available relative to the project (i.e., existing plans, traffic study information, economic and demographic information, etc.) will be made available to BAYSIDE so that we may properly review the project area and also for use in the preparation of the necessary report.
- B. Fees for services as described herein will be paid to BAYSIDE by the TOWN as the work progresses, based upon the presentation of a monthly statement for services by BAYSIDE. (See attached "Standard Terms and Conditions,,")
- C. Nothing contained herein shall obligate BAYSIDE to prepare for, or appear in arbitration or litigation on behalf of the TOWN or to undertake additional work on matters not included herein, except in consideration of additional compensation mutually agreed upon.
- D. Unless otherwise provided for hereinbefore, the attached "Standard Terms and Conditions,, are incorporated herein by reference, and shall be considered a part of this Agreement.

**V. ENTIRE AGREEMENT**

- A. This Agreement constitutes the entire understanding between the parties with respect to the subject matter hereof, and shall supersede all understandings and agreements between the parties prior to the date hereof.

IN WITNESS WHEREOF, the parties have set their hands and seals this day and year first above written.

BAYSIDE ENGINEERING, INC.

DATE: 11-30-18

BY: Bree Sullivan  
Bree Sullivan, P.E.  
Senior Civil/Environmental Engineer

TOWN OF GRAFTON, MASSACHUSETTS

DATE: \_\_\_\_\_

\_\_\_\_\_

DATE: \_\_\_\_\_

\_\_\_\_\_

DATE: \_\_\_\_\_

\_\_\_\_\_

DATE: \_\_\_\_\_

\_\_\_\_\_

DATE: \_\_\_\_\_

\_\_\_\_\_

CERTIFICATION AS TO THE  
AVAILABILITY OF FUNDS

DATE: \_\_\_\_\_

\_\_\_\_\_



**ATTACHMENT A**

**TOWN OF GRAFTON, MASSACHUSETTS  
PROFESSIONAL ENGINEERING SERVICES  
FOR PERFORMING INITIAL PROJECT STANDARDS FOR CULVERT  
REPLACEMENT ON STOWE STREET, GRAFTON, MA**

*Fee Schedule*

**Design**

Total Hourly Services (Not-to-Exceed)	\$44,500
Total Reimbursable Expenses (Not-to-Exceed)	<u>\$ 5,500</u>
<b>Total Design and Survey Services (Time and Materials)</b>	<b><u>\$50,000</u></b>

**Construction as needed and directed by Town**

Total Hourly Services (Not-to-Exceed)	\$5,000
Total Reimbursable Expenses (Not-to-Exceed)	<u>\$ 500</u>
<b>Total Construction Services (Time and Materials)</b>	<b><u>\$5,500</u></b>

## BAYSIDE ENGINEERING, INC. - STANDARD TERMS AND CONDITIONS

**1. General:** The following Standard Terms and Conditions, together with the attached Proposal and Standard Fee Schedule constitute the Agreement between Bayside Engineering, Inc. and the entity or person to whom the proposal is addressed (Client) for the performance of basic or additional services. The Standard Fee Schedule may be omitted for Lump Sum type Agreements.

**2. Standard of Care:** Services provided by the Bayside Engineering, Inc. under this agreement shall be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession (the generally accepted professional standard care) in the same locale currently practicing under similar circumstances and at the time of the subject services. No warranty, express or implied, is included or intended by this Agreement.

**3. Payments:** Unless otherwise agreed upon, payments are due within thirty days after the rendering of our invoices. Failure of the Client to make payments when due may be cause for suspension of services. Interest will be added to accounts in arrears at the rate of one and one-half (1.5) percent per month on the outstanding balance. Bayside Engineering, Inc. shall be entitled to reimbursement of all costs actually incurred by it in collecting overdue accounts, including reasonable administration, legal consulting fees and agency fees. In the event Bayside Engineering, Inc. must engage counsel to enforce overdue payments, Client will reimburse Bayside Engineering, Inc. for all reasonable attorney's fees and court costs.

**4. Special Consultants/Subcontractors** are those defined as providing services other than those provided by normal consultants associated with Bayside Engineering, Inc.

**5. Insurance:** Bayside Engineering, Inc. shall obtain and maintain during the performance of this Agreement its standard insurance coverage as follows:

Professional Liability insurance policy during the performance of this Agreement for errors, omissions or negligent acts arising out of performance of this Agreement in the amount of \$2,000,000

Workmen's Compensation and Employer's Liability Insurance in compliance with statutory limits.

Comprehensive General Liability Insurance including property damage, bodily injury or death, in an amount not less than \$2,000,000 \$2,000,000 and motor vehicle liability insurance against claims for damages because of bodily injury or death of any person or damage to property in an amount not less than \$500,000-\$1,000,000.

**6. Electronic Media:** All electronic media shall be the exclusive property of Bayside Engineering, Inc. unless otherwise stated in Bayside Engineering, Inc. written agreement. Bayside Engineering, Inc. may agree to provide materials to client stored electronically. Client recognizes that data, plans, specifications, reports, documents or other information recorded on or transmitted as electronic media are subject to undetectable alteration, either intentional or unintentional, due to (among other causes) transmission,

conversion, media degradation, software error or human alteration. Accordingly, documents provided to client in electronic media are for informational purposes only and not an end product.

Documents will conform to specifications defined in the scope of services. The documents are submitted to client for an acceptance period of 30 days. Any defects which client discovers in that time period shall be reported to Bayside Engineering, Inc. for correction. Bayside Engineering, Inc. makes no warranties, either express or implied, regarding the fitness or suitability of the electronic media.

The electronic media are instruments of professional service and shall not be used in whole or in part for any project other than that for which they were created, without the express written consent of Bayside Engineering, Inc. and without suitable compensation. Accordingly, client agrees to waive any and all claims against Bayside Engineering, Inc. resulting in any way from the unauthorized reuse or alteration of electronic media and to defend, indemnify and hold Bayside Engineering, Inc. harmless for any claims, losses, damages or costs, including attorney's fees, arising out of the reuse of any electronic media.

**7. Design Services / Changes to Design:** This contract and associated design fee does not include excessive changes to the working drawings after initial completion or excessive changes during the final design stage. Said changes shall be considered *Additional Services* and shall be billed on an hourly basis at Bayside Engineering, Inc. standard billing rates in affect at the time services are performed. When excessive changes occur or are requested by the client, Bayside Engineering, Inc. shall notify the client in writing and request written authorization for Additional Services before proceeding with said services.

**Estimates:** As Bayside Engineering, Inc. has no control over construction costs or contractor's prices, any construction cost estimates are made on the basis of our firm's experience and judgment as design professionals, but it cannot and does not warrant or guarantee that contractor's proposals, bids or costs will not vary from its estimates.

**8. Services During Construction:** If Bayside Engineering, Inc. services include the performance of services during the construction phase of the project, it is understood that the purpose of such services, including visits to the site, will be to enable Bayside Engineering, Inc. to better perform the duties and responsibilities assigned to and undertaken by it as a design professional, and to provide the client with a greater degree of confidence that the completed work of contractors will conform generally to the contract documents.

Bayside Engineering, Inc. shall not, during such visits or as a result of observations of construction, supervise, direct or have control over Contractor's work nor shall Bayside Engineering, Inc. have authority over, or responsibility for, the means, methods, techniques, sequences or procedures of construction selected by the contractors or safety precautions and programs incident to the work of contractors or for any failure of contractors to comply with laws, rules, regulations, ordinances, codes or orders applicable to contractors furnishing and performing their work. Bayside Engineering, Inc. does not guarantee the performance of the construction contract by the contractors and does not assume

## BAYSIDE ENGINEERING, INC. - STANDARD TERMS AND CONDITIONS

responsibility for contractors failure to furnish and perform their work in accordance with the contract documents.

If Bayside Engineering, Inc. services during construction include shop drawing review, Bayside Engineering, Inc. will review (or take other appropriate action with respect to) shop drawings, samples and other data which contractors are required to submit, but only for conformance with the design concept of the project and compliance with the design concept of the project and compliance with the information given in the contract documents. Such review or other actions shall not extend to means, methods, techniques, sequences or procedures of manufacture (including the design of manufactured products) or construction, or to safety precautions and programs incident thereto. Bayside Engineering, Inc.'s review or other actions, shall not constitute approval of an assembly or product of which an item is a component, nor shall it relieve the contractors of (a) their obligations regarding review and approval of any such submittals; and (b) their exclusive responsibility for the means, methods, sequences, techniques and procedures of construction, including safety of construction.

It is understood that the contractor, not the Engineer, is responsible for construction of the project and that Bayside Engineering, Inc. is not responsible for acts or omissions of any contractor, subcontractor or material supplier, for safety precautions, programs or enforcement, or for construction means, methods, techniques, sequences and procedures, employed by the contractor.

9. **Termination:** The Client or Bayside Engineering, Inc. may, at any time and for any reason terminate this agreement by giving ten (10) days written notice effective after receipt of said notice by either party. Client agrees to compensate Bayside Engineering, Inc. for all services performed prior to the effective date of the termination, together with reimbursable expenses including subcontractors, subconsultants and vendors. No deductions shall be made from Bayside Engineering, Inc. compensation on account of sums withheld from payments to subcontractors, nor shall payment to Bayside Engineering, Inc. be contingent upon financing arrangements or receipt of payment from any third party.

If client fails to make payment when due for services and reimbursable expenses, Bayside Engineering, Inc. may, upon seven (7) days written notice to client, suspend performance of services under this agreement. Unless payment in full is received by Bayside Engineering, Inc. within seven (7) days of the date of the notice, the suspension shall take effect without further notice. In the event of a suspension of services, Bayside Engineering, Inc. shall have no liability to client for delay or damage to client or others because of such suspension of services.



*2019 Hourly Billing Rates*

PRINCIPAL	\$175.00
PROJECT MANAGER	\$165.00
SENIOR ENGINEER	\$150.00
PROJECT ENGINEER	\$135.00
SENIOR DESIGNER	\$125.00
STAFF ENGINEER	\$110.00
JR. ENGINEER/DESIGNER	\$ 95.00
SENIOR DRAFTER	\$ 90.00
CLERICAL	\$ 65.00
THREE-PERSON SURVEY CREW	\$195.00
GPS SURVEYOR	\$185.00
TWO-PERSON SURVEY CREW	\$175.00
PROFESSIONAL LAND SURVEYOR	\$140.00
CONSTRUCTION PROJECT MANAGER	\$115.00
CONSTRUCTION ENGINEER	\$105.00
RESIDENT PROJECT REPRESENTATIVE	\$ 90.00



Charles D. Baker, Governor  
Karyn E. Polito, Lieutenant Governor  
Stephanie Pollack, Secretary & CEO  
Jonathan L. Gulliver, Highway Administrator



October 13, 2018

Town of Grafton  
Town Administrator  
30 Providence Rd.  
Grafton, MA 01519

Attn: Dave Crouse, Highway Supt.

SUBJECT: SMALL BRIDGE INSPECTION REPORT

G-08-048

(6Q2) STOWE ST / MISCOE BROOK

Dated: 06/06/18



Dear Mr. Crouse:

As part of the Massachusetts Bridge Inspection Program, MassDOT – Highway Division now also performs inspections of municipally owned bridges whose spans are between 10 feet and 20 feet.

**In review of attached report please note the deficiencies highlighted for your immediate attention.**

For your records is a copy of recent bridge inspection field report for the referenced municipally owned bridge. Repair, rehabilitation or reconstruction of any bridges to address the deficiencies reported is the owner/custodian's responsibility. Chapter 90 funds may be used for these purposes.

Questions regarding the content of the report may be directed to the District Bridge Inspection Engineer, Mahmood Azizi, at 508-929-3822.

Sincerely,

Barry Lorion  
District 3 Highway Director

MA/ma  
cc: BIE (2), DHD D-3, DBIE D-3  
Enclosure

2-DIST  
03B.I.N.  
6Q2

## STRUCTURES INSPECTION FIELD REPORT

## ROUTINE &amp; SPECIAL MEMBER INSPECTION

BR. DEPT. NO.  
G-08-048

CITY/TOWN GRAFTON		8-STRUCTURE NO. G08048-6Q2-MUN-CUL		11-Kilo. POINT 000.000	41-STATUS D:OPEN	90-ROUTINE INSP DATE JUN 6, 2018
07-FACILITY CARRIED HWY STOWE ST		MEMORIAL NAME/LOCAL NAME		27-YR BUILT 1900	105-YR REBUILT 1938	YR REHAB'D (NON 105) 0000
06-FEATURES INTERSECTED WATER MISCOE BROOK		26-FUNCTIONAL CLASS Urban Local		DIST. BRIDGE INSPECTION ENGINEER M. Azizi		
43-STRUCTURE TYPE 302 : Steel Stringer/Girder		22-OWNER Town Agency	21-MAINTAINER Town Agency	TEAM LEADER J. Sawyer		
107-DECK TYPE 1 : Concrete Cast-in-Place		WEATHER Sunny	TEMP (air) 21°C	TEAM MEMBERS T. TOLOCZKO		

ITEM 58			4	DEF
DECK				
1.Wearing surface	7	-		
2.Deck Condition	4	S-A		
3.Stay In place forms	N	-		
4.Curbs	N	-		
5.Median	N	-		
6.Sidewalks	N	-		
7.Parapets	N	-		
8.Railing	5	S-A		
9.Anti Missile Fence	N	-		
10.Drainage System	N	-		
11.Lighting Standards	N	-		
12.Utilities	X	-		
13.Deck Joints	N	-		
14.	N	-		
15.	N	-		
16.	N	-		

CURB REVEAL  
(In millimeters)N S  
N N

APPROACHES			DEF
a. Appr. pavement condition	5	S-P	
b. Appr. Roadway Settlement	5	S-A	
c. Appr. Sidewalk Settlement	N	-	
d.	N	-	

OVERHEAD SIGNS (Attached to bridge)			(Y/N)	N	DEF
a. Condition of Weirds	N	-			
b. Condition of Bolts	N	-			
c. Condition of Signs	N	-			

ITEM 59			4	DEF
SUPERSTRUCTURE				
1.Stringers	N	-		
2.Floorbeams	N	-		
3.Floor System Bracing	N	-		
4.Girders or Beams	4	S-A		
5.Trusses - General	N	-		
a. Upper Chords	N	-		
b. Lower Chords	N	-		
c. Web Members	N	-		
d. Lateral Bracing	N	-		
e. Sway Bracings	N	-		
f. Portals	N	-		
g. End Posts	N	-		
6.Pin & Hangers	N	-		
7.Conn Pl'ts, Gussets & Angles	N	-		
8.Cover Plates	N	-		
9.Bearing Devices	N	-		
10.Diaphragms/Cross Frames	N	-		
11.Rivets & Bolts	N	-		
12.Welds	N	-		
13.Member Alignment	6	-		
14.Paint/Coating	N	-		
15.	N	-		

Year Painted N

COLLISION DAMAGE: Please explain  
None (X) Minor ( ) Moderate ( ) Severe ( )LOAD DEFLECTION: Please explain  
None (X) Minor ( ) Moderate ( ) Severe ( )LOAD VIBRATION: Please explain  
None (X) Minor ( ) Moderate ( ) Severe ( )

Any Fracture Critical Member: (Y/N)

N

Any Cracks: (Y/N)

N

ITEM 60			4	DEF
SUBSTRUCTURE				
1. Abutments	Dive	Cur	4	
a. Pedestals	N	N		
b. Bridge Seats	N	H		
c. Backwalls	N	H		
d. Breastwalls	N	4		S-A
e. Wingwalls	N	5		S-P
f. Slope Paving/Rip-Rap	N	N		
g. Pointing	N	N		
h. Footings	N	N		
i. Piles	N	N		
j. Scour	N	5		M-P
k. Settlement	N	N		
l.	N	N		
m.	N	N		
2. Piers or Bents			N	
a. Pedestals	N	N		
b. Caps	N	N		
c. Columns	N	N		
d. Stems/Walls/Pierwalls	N	N		
e. Pointing	N	N		
f. Footing	N	N		
g. Piles	N	N		
h. Scour	N	N		
i. Settlement	N	N		
j.	N	N		
k.	N	N		
3. Pile Bents			N	
a. Pile Caps	N	N		
b. Piles	N	N		
c. Diagonal Bracing	N	N		
d. Horizontal Bracing	N	N		
e. Fasteners	N	N		

UNDERMINING (Y/N) If YES please explain N

COLLISION DAMAGE:  
None (X) Minor ( ) Moderate ( ) Severe ( )SCOUR: Please explain  
None (X) Minor ( ) Moderate ( ) Severe ( )

I-60 (Dive Report): N

I-60 (This Report): 4

93B-U/W (DIVE) Insp

00/00/0000

X=UNKNOWN

N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE

R=REMOVED

CITY/TOWN GRAFTON	B.I.N. 6Q2	BR. DEPT. NO. G-08-048	8-STRUCTURE NO. G08048-6Q2-MUN-CUL	INSPECTION DATE JUN 6, 2018
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## ITEM 61

5

CHANNEL &  
CHANNEL PROTECTION

	Dive	Cur	DEF
1. Channel Scour	N	5	M-P
2. Embankment Erosion	N	6	-
3. Debris	N	4	S-P
4. Vegetation	N	6	-
5. Utilities	N	N	-
6. Rip-Rap/Slope Protection	N	N	-
7. Aggradation	N	N	-
8. Fender System	N	N	-

## STREAM FLOW VELOCITY:

Tidal ( ) High ( ) Moderate ( ) Low (X) None ( )

ITEM 61 (Dive Report): N ITEM 61 (This Report): 5

93b-UW INSP. DATE: 00/00/0000

## RATING

Rating Report (Y/N): Y

Date: 07/01/2002

Inspection data at time of existing rating  
158 - 159 - 160 4 Date: 11/30/2001

## ITEM 36 TRAFFIC SAFETY

	36	COND	DEF
A. Bridge Railing	0	5	S-A
B. Transitions	0	N	-
C. Approach Guardrail	0	N	-
D. Approach Guardrail Ends	0	N	-

## WEIGHT POSTING

	Not Applicable	X
Actual Posting	N	N
Recommended Posting	N	N
Waived Date: 10/30/2002	EJDMT Date: 00/00/0000	

Signs In Place  
(Y=Yes, N=No,  
NR=Not Required)  
Legibility/  
Visibility

At bridge	Other Advance
E W	E W

## CLEARANCE POSTING

Not	X	N	S
Actual Field Measurement		ft in	ft in meter
Posted Clearance		0 0	0 0
Signs In Place		N S	N S
(Y=Yes, N=No, NR=Not Required)			
Legibility/ Visibility			

(To be filled out by DBIE)

Request for Rating or Rerating (Y/N): N

REASON:

If YES please give priority

HIGH ( ) MEDIUM ( ) LOW ( )

## ACCESSIBILITY (Y/N/P)

	Needed	Used
Lift Bucket	N	N
Ladder	N	N
Boat	N	N
Waders	Y	Y
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	N	N
RR Flagger	N	N
Police	N	N
Other:	N	N

## TOTAL HOURS

8

## PLANS (Y/N)

N

## (V.C.R.) (Y/N):

N

## TAPE#:

List of field tests performed:

## CONDITION RATING GUIDE

(For Items 58, 59, 60 and 61)

CODE	CONDITION	DEFECTS
N	NOT APPLICABLE	
G 9	EXCELLENT	Excellent condition
G 8	VERY GOOD	No problem noted
G 7	GOOD	Some minor problems
F 6	SATISFACTORY	Structural elements show some minor deterioration
F 5	FAIR	All primary structural elements are sound but may have minor section loss, cracking, spalling or scour
P 4	POOR	Advanced section loss, deterioration, spalling or scour
P 3	SERIOUS	Loss of section, deterioration, spalling or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present
C 2	CRITICAL	Advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the bridge until corrective action is taken
C 1	"IMMINENT" FAILURE	Major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic but corrective action may put it back in light service
0	FAILED	Out of service - beyond corrective action

## DEFICIENCY REPORTING GUIDE

DEFICIENCY: A defect in a structure that requires corrective action

## CATEGORIES OF DEFICIENCIES:

M=Minor Deficiency - Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor potholes, Minor corrosion of steel, Minor scouring, Clogged drainage, etc.

S=Severe/Major Deficiency - Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.

C-S=Critical Structural Deficiency - A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which would affect the structural integrity of the bridge.

C-H=Critical Hazard Deficiency - A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples include but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.

## URGENCY OF REPAIR:

I=Immediate - (Inspector(s)) immediately contact District Bridge Inspection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her.

A=ASAP - (Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report).

P=Prioritize - (Should be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available).

## STRUCTURES INSPECTION FIELD REPORT

## ROUTINE &amp; SPECIAL MEMBER INSPECTION

BR. DEPT. NO.

G-08-048

2-DIST

03

B.I.N.

6Q2

CITY/TOWN <b>GRAFTON</b>	8-STRUCTURE NO. <b>G08048-6Q2-MUN-CUL</b>	11-Kilo POINT <b>000.000</b>	90-ROUTINE INSP DATE <b>Jun 6, 2018</b>	93*-SPEC. MEMB. INSP DATE <b>Jun 6, 2018</b>
07-FACILITY CARRIED <b>HWY STOWE ST</b>	MEMORIAL NAME/LOCAL NAME	27-YR BUILT <b>1900</b>	105-YR REBUILT <b>1938</b>	*YR REHAB'D (NON 106) <b>0000</b>
06-FEATURES INTERSECTED <b>WATER MISCOE BROOK</b>	26-FUNCTIONAL CLASS <b>Urban Local</b>	DIST. BRIDGE INSPECTION ENGINEER <i>N. Aridi</i>		
13-STRUCTURE TYPE <b>302 : Steel Stringer/Girder</b>	22-OWNER Town Agency	21-MAINTAINER Town Agency	TEAM LEADER J. Snyder <i>T. Toloczko</i>	
107-DECK TYPE <b>1 : Concrete Cast-in-Place</b>	WEATHER <b>Sunny</b>	TEMP (air) <b>21°C</b>	TEAM MEMBERS <b>T. TOLOCZKO</b>	

WEIGHT POSTING	Not Applicable <input checked="" type="checkbox"/>	At bridge	Advance	PLANS (Y/N): <b>N</b>
Actual Posting	H 3 3S2 Single <b>N N N N</b>	E W	E W	(V.C.R.) (Y/N): <b>N</b>
Recommended Posting	<b>N N N N</b>			TAPE#:
Waived Date: <b>10/30/2002</b>	EJDMT Date: <b>00/00/0000</b>			

## RATING

Rating Report (Y/N): **Y** Date: **07/01/2002**

Inspection data at time of existing rating  
I 58: - I 59: - I 60: 4 I 62: - Date: 11/30/2001

Request for Rating or Rerating (Y/N): **N** If YES please give priority:  
HIGH ( ) MEDIUM ( ) LOW ( )

REASON:

## SPECIAL MEMBER(S):

	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORROSION, SECTION LOSS (%), CRACKS, COLLISION DAMAGE, STRESS CONCENTRATION, ETC.	CONDITION		INV. RATING OF MEMBER FROM RATING ANALYSIS			Deficiencies
					PREVIOUS (0-9)	PRESENT (0-9)	H-20	3	3S2	
A	Item 58.2 - Deck Condition	N		See remarks in comments section.	5	4	Not Rated			S-A
B	Item 59.4 - Girders or Beams	N		See remarks in comments section.	4	4	19	36	57	S-A
C	Item 60.1.d - Breastwalls	N		See remarks in comments section.	4	4	Not Rated			S-A
D										
E										

## List of field tests performed:

(Overall Previous Condition)

(Overall Current Condition)

I-58	I-59	I-60	I-62
4	4	4	4
4	4	4	4

DEFICIENCY: A defect in a structure that requires corrective action

## CATEGORIES OF DEFICIENCIES:

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- S= Severe/Major Deficiency** - Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebar, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.
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## URGENCY OF REPAIR:

- I= Immediate** - (Inspector(s) immediately contact District Bridge Inspection Engineer (DB IE) to report the Deficiency and to receive further instruction from him/her)
- A= ASAP** - (Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report)
- P= Prioritize** - (Shall be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available).

X=UNKNOWN

N=NOT APPLICABLE

H=HIDDEN/INACCESSIBLE

R=REMOVED



CITY/TOWN GRAFTON	B.I.N. 6Q2	BR. DEPT. NO. G-08-048	8-STRUCTURE NO. G08048-6Q2-MUN-CUL	INSPECTION DATE JUN 6, 2018
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## REMARKS

### BRIDGE ORIENTATION

From the rating report the approaches are East and West and the elevations are North and South. This is a single span concrete slab bridge with 20 embedded steel railroad track rails. The Miscoe brook flows from North to South.

### GENERAL REMARKS

The structure is now a single lane with stop signs at each approach. There are Jersey barrier on each side of the wearing surface, 6 on the North side and 4 on the South side, channeling the traffic to one lane. See photos #1 and #2.

This structure is being inspected as a steel beam bridge, because the rating report indicates that there are steel railroad rails placed 16 inches on center. The mild steel rails measure 5- 1/2 inch bottom flange, 3 inch top flange, 5 inch height.

As the "rail beams" are embedded, their condition shall be rated based on the condition of the deck undersurface. Only the South beam is exposed due to the spalled and deteriorated concrete around it.

There were two cores taken in June 2002:

Northwest core had 4 inches of asphalt, 6- 1/2 inches of loose concrete/gravel, and 6- 1/2 inches of sound concrete.

Southeast core had 5 inches of gravel, 3 inches of loose concrete/gravel, and 8 inches of concrete.

The year built and rebuilt has been revised based on Engineering Judgement.

### ITEM 58 - DECK

#### Item 58.2 - Deck Condition

The deck undersurface has severe longitudinal hairline cracks with efflorescence, most predominate near the exteriors. There is full width x 2 foot long delamination at the North end. See photos #3 and #4.

There is severe deterioration along the entire length of the South face, full height x full width x up to 3 feet deep, exposing the wire mesh and the exterior rail beam. See photo #5.

The North face has a full length x up to 6 inches high x 4 inches deep spalling and deterioration to the cold joint at the rail base interface, and horizontal hairline cracks with efflorescence in the deck fascia. See photo #6.

#### Item 58.8 - Railing

The North bridge rail consists of one single panel "ss" type guard rail with boxing glove ends, attached to a concrete rail base attached to the outside edge of the deck. The rail base is deteriorating. See Item 58.2.

The South rail consists of 3 Jersey type barriers where the original elements have spalled away.

The 3 Jersey barriers are somewhat unsupported, and have settled and rotated outward due to the deck deterioration underneath.

The existing rail condition is unchanged from the previous inspection but now there is new Jersey Style barrier in place in front of the deficient rail and channels the traffic into one lane. See photo #7. The rating has thus been raised from "3" to a "5".

### APPROACHES

#### Approaches a - Appr. pavement condition

There is minor transverse cracking in both approaches.

The East approach to deck transition has full width cracking with breakup, settlement, a 2 foot wide x 1 foot long bituminous concrete patch and a 6 inch diameter pothole. See photo #8.

The West approach to deck transition has full width cracking with a 1 foot diameter bituminous concrete patch. See photo #9.

#### **4 (c) NEW BUSINESS – GIFT ACCOUNT – CERTS**

The Director of Grafton's Community Emergency Response Team (CERTS) has asked use to create a gift account for donations. All year long, the C.E.R.T.S team donates their time to help with local events (especially those drawing large crowds). Many times donations are offered as a thank you. As an example, the Lions Club would like to thank the team for assisting with traffic control and parking during their Haunted Hayride. If an account existed, they could use the funds for items such as two way radios, vests, classes and much more. There is no budget for the CERTS team, and current purchases come from grants which the director pursues. A gift account will allow them to accept donations and make additional purchases (outside of grant money) when needed.

#### **MOTION:**

I move the board vote to establish a C.E.R.T.S. Gift Account for the purpose of collecting & depositing donations specific for the C.E.R.T.S Team.